# STATE OF COLORADO

John W. Hickenlooper, Governor Christopher E. Urbina, MD, MPH Executive Director and Chief Medical Officer

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4300 Cherry Creek Dr. S. Denver, Colorado 80246-1530 Phone (303) 692-2000 Located in Glendale, Colorado Laboratory Services Division 8100 Lowry Blvd. Denver, Colorado 80230-6928 (303) 692-3090

http://www.cdphe.state.co.us



#### Colorado Operator Certification Examination Policies and Procedures

# Approved by the Water and Wastewater Facility Operators Certification Board August 26, 2003

(As amended November 25, 2003, April 27, 2004, October 26, 2004, and April 26, 2005)

#### A. Background

The purpose of this Colorado Operator Certification Examination Policies and Procedures document is to provide an explanation of the current practices applicable to the administration of water and wastewater facility operators certification examinations in Colorado. These Policies and Procedures supplement the information contained in the Water and Wastewater Facility Operators Certification Board's Regulation No. 100, "Water and Wastewater Facility Operators Certification Requirements" (5 CCR 1003-2). This regulation is available on the Board's web site at <a href="www.cdphe.state.co.us/op/ocb/ocbhom.asp">www.cdphe.state.co.us/op/ocb/ocbhom.asp</a>. Persons with additional questions that are not answered by this document should contact the Operators Certification Program Office (OCPO), at 303-394-8994, (OCPO@ocpoweb.com), mailing address is 2170 South Parker Road, #290, Denver, Colorado 80231. Or the Water and Wastewater Facility Operators Certification Board Office, at (cdphe.wwfocb@state.co.us).

#### B. Certification Examinations Offered

Certification examinations are offered in two separate exam cycles each year. Separate schedules apply for (1) treatment plant operator certification examinations and (2) distribution and collection system operator certification examinations.

# 1. Treatment Plant Operator Certification Exams

Two examination cycles are offered each year for treatment plant operator certification examinations, under the administration of Colorado Environmental Certification and Testing, Inc. (CECTI). The "spring" cycle includes examinations offered on several dates from mid-January through March. The "fall" cycle includes examinations offered on several dates from August through mid-November.

The locations of the examinations vary for the individual dates offered. Although examinations for all certification levels (Water, Wastewater, and Industrial, levels A through D; Small Water and Wastewater; and Transient Non-Community) are offered during each exam cycle, all levels are not offered on each of the exam dates. Please refer to the Board's web site noted above for specific information regarding the upcoming exam cycle, or contact OCPO at the phone number listed above.

2. Distribution and Collection System Operator Certification Exams

Two examination cycles are offered each year for water distribution and wastewater collection system operator certification examinations, under the administration of the Colorado Distribution and Collection Systems Certification Council (the Certification Council). For each cycle, examinations are offered at multiple locations, but all on the same date. The spring exam date is typically in mid-May. The fall exam date is typically in mid-November. On each date, examinations are offered for all water distribution and wastewater collection certification levels (1 through 3) and for Small Water and Wastewater System certifications. Please refer to the Board's web site noted above for specific information regarding the upcoming exam cycle, or contact OCPO at the phone number listed above.

# C. <u>Application Process</u>

#### 1. Application Deadlines

Please refer to the Board's web site noted above to confirm specific application deadlines for individual exam cycles. The deadlines for the treatment plant operator certification examinations are December 1 for the spring cycle exams and June 1 for the fall cycle exams. For the water distribution and wastewater collection system operator exams, starting in 2004 the deadlines will be February 15 for the spring exams and August 15 for the fall exams. **Please note** that if a deadline would fall on a weekend or legal holiday, the deadline is extended to the next day that is not a Saturday, Sunday or legal holiday.

Please note that the application deadlines specified are the dates by which applications must be received by OCPO. Operators may submit applications by mail, fax or hand-delivery. Operators who choose to submit applications by mail are strongly encouraged to mail the application well before the deadline to ensure that it is received on time. Applications received after the deadline will not be processed; rather, the operator will need to re-apply to take an examination in a later exam cycle.

On rare occasions, an issue has arisen where an operator has mailed an application that has apparently become lost in the mail. In such circumstances, the operator may be allowed to take the examination, at the discretion of OCPO, if the operator can document that the application was mailed in a timely manner.

#### 2. Specific Application Procedures

Instructions for completing applications to take operator certification examinations are posted on the Board's web site noted above, along with the application form. Application forms and instructions can also be obtained from OCPO.

## All application forms must be filled out completely. Incomplete application forms will not be processed.

Payment of the required \$15.00 application fee and the \$45.00 examination fee (for a total of \$60.00) **must accompany the application**. If the application is not approved, the \$45.00 examination fee will be refunded upon request after the examination cycle has been completed.

#### 3. Review and Notification of Acceptance/Rejection

Except as noted, the timing discussed in this section applies to certification examinations for both (1) treatment plant operators and (2) water distribution and wastewater collection system operators.

- Approximately three weeks following the application deadline, the operator will receive an initial notification whether the certification examination application has been approved or disapproved.
- If the application is approved, instructions will be provided regarding admission to the examination. If the application is disapproved, the operator may request a re-review of the application, including

consideration of any clarifying information that the operator may choose to submit regarding the identified basis for disapproval. Any such request for re-review must be received by OCPO within two weeks of the date of the disapproval notification letter. All factual information supporting the application must be received with the re-review request.

- The operator will receive notification of the results of a re-review approximately two weeks after such requests were due.
- If an application is still disapproved after re-review, the operator may appeal this determination to the Water and Wastewater Facility Operators Certification Board. Any such appeal must be received in the Board's office within two weeks of the date of the second disapproval notification letter. The appeal must include a supporting explanation as to why the operator believes the disapproval is in error.
- The Board will consider any exam application appeal at its next regularly scheduled meeting. (Please note that for treatment plant operator certification examinations, exam dates early in each exam cycle may fall before the date that the Board considers an appeal. If the Board grants an appeal in such circumstances, the operator will be allowed to take the certification examination on a later scheduled exam date.)

If an application to take an examination at a particular level is denied (e.g. due to inadequate experience) the operator will not be allowed to take a lower level examination in that same exam cycle, even if the operator's experience is determined to be adequate for that lower level exam. The reason for this practice is that it is not feasible to plan in advance for multiple exams at multiple levels for multiple operators, in an effort to anticipate all possible results of operator appeals.

## D. <u>Experience Requirements</u>

The Board's Regulation No. 100 specifies the minimum experience requirements that apply for each certification level. Except for the entry level operator certifications (Class D treatment plant operators, Class 1 distribution and collection operators, and Small Water or Wastewater System operators), experience must be demonstrated in a certification examination application in order for the application to be approved. This subsection addresses several issues that have arisen regarding experience requirements.

#### 1. Experience Cut-off Date

The Board's policy is that the certification examination application deadline will be used as the experience cut-off date in determining whether an operator has the required experience to take a certification examination at a particular level.

The Board recognizes that there are tradeoffs in using this date. Of course, whatever date is selected will result in some operators, whose experience anniversaries will fall just before or just after the cut-off date, needing to wait longer than others to take exams. The factors that led to using the application deadline as the cutoff include the administrative complications, and resulting cost, that would be associated with having to reconfirm employment or experience status for operators following the initial review and processing of applications. This effort would be further complicated by the fact that exams are offered on multiple dates during a particular testing cycle.

#### "Part-time" Experience

For systems that require less than a full-time operator for proper operation, experience of operators who work less than half time will be counted as half-time experience, and experience of operators who work half time or more will be counted as full-time experience. Therefore, for example, an operator working part-time on water treatment and part-time on wastewater treatment can accumulate two years experience in each area during a four-year employment period, which would qualify for taking a class A water and/or wastewater treatment examination.

In calculating experience, please also note the following:

- No more than one year's experience credit will be counted for employment during one calendar year.
- Experience credit for operation of a seasonal water or wastewater system will be accrued only for that portion of the year during which the facility is in operation.

The Board recognizes that the minimum experience requirements may be met by operators with a wide range of actual experience. Evaluation of the quality of individual operators' experience is a factor to be evaluated by facilities hiring certified operators.

#### 2. On-site Operating Experience

Any on-site experience with the daily operational aspects of a facility that will directly impact the quality and/or quantity of drinking water, treated domestic or industrial wastewater, or treatment residuals will be considered to be "actual on-site operating experience". Activities including, but not limited to, supervision, laboratory analysis, electronic system operation (SCADA), load control, or engineering are acceptable as qualifying experience only if the applicant demonstrates that he/she is directly and routinely responsible for actual process control/ system integrity decisions that may affect public health or the environment in the performance of these activities.

3. Industrial Wastewater Treatment Experience Evaluation Guidelines

The statute governing operator certification, section 25-9-102(4.7) CRS, states:

"Industrial wastewater treatment facility" means any facility or group of units used for pretreatment, treatment, or handling of industrial waters, wastewater, reuse water, and wastes that are discharged into state waters. "Industrial wastewater treatment facility" includes facilities that clean up contaminated ground water or spills; except that such term does not include facilities designed to operate for less than one year or facilities with in-situ discharge.

The following guidelines have been developed to assist the Application Review Committee in determining whether an applicant's operational experience at a given facility is acceptable toward meeting the minimum experience requirements of Regulation No. 100. Whether an applicant's experience is "operational" will be evaluated under the criteria of section D.3 of this document.

Applicants are required to provide (a) the permit number that authorizes direct discharge to state waters for the facility; or (b) the permit number of the publicly owned treatment works (POTW) that accepts flow from the facility; or (c) a statement explaining why the facility has neither.

Experience gained at industrial facilities that discharge directly to state waters under a Colorado Discharge Permit System (CDPS) permit or under a National Pollutant Discharge Elimination System (NPDES) permit will be accepted as qualifying experience for purposes of certification examinations. Experience gained at out-of-state industrial facilities meeting equivalent criteria will be accepted as qualifying experience for purposes of certification examinations.

Experience gained at facilities that discharge to a publicly-owned treatment works (POTW) will be considered to be "industrial" and will be accepted as qualifying experience for purposes of certification examinations if:

(1.) the facility is a *categorical discharger* as listed in sections 63.12 through 63.52, 5 CCR 1002-63;

(2.) the facility meets the criteria to be designated a *significant industrial user* as defined in section 63.7.CC, 5 CCR 1002-63. (Note: documentation of this status may be requested by the Application Review Committee.)

Experience gained at industrial facilities discharging directly to state waters without a CDPS or NPDES permit but under another federal or state authority will be accepted as qualifying experience for purposes of certification examinations. An example of such a facility would be a "superfund" site or a site operating under CERCLA or RCRA authority.

Qualifying experience for purposes of certification examinations will not be granted for experience at industrial facilities that do not discharge to state waters or to a POTW. For example, effluent or re-use water that is landapplied at or below the agronomic uptake rate is not considered to be discharge to state waters.

#### 4. Entry Level Certification Experience Requirements

Applicants for entry level operator certifications (Class D treatment plant operators, Class 1 water distribution and wastewater collection operators, and small water or wastewater system operators) must satisfy a one-month experience requirement to obtain certification. Unlike other certification levels, applicants may take the examination for these entry level certifications <u>before</u> accruing the necessary experience that will be required for issuance of a certificate.

Regulation No. 100 also provides a flexible set of options for meeting the entry level operator experience requirement. It provides that the experience may be accrued under the supervision of a certified operator, through on the job training with a certified operator, or through apprenticeship with a contract operator who is certified. The regulation also provides that the required experience may be accrued through the successful completion of an on-site or correspondence training course, approved by the Board or its designee, which is designed to prepare the Class D/Class 1 operator to operate Class D/Class 1 facilities. Courses that have been approved as satisfying this entry level experience requirement are specifically identified on the OCPO web site with the notation\*\*.

Finally, note that there is no minimum experience requirement for the Transient Non-community Water System Operator certification.

#### 5. Education Substitute for Experience

For all certification levels other than the entry level certifications addressed above, Regulation No. 100 provides that education may be substituted for up to 50 percent of the experience requirement for operator certification. If an operator is relying on education to meet a portion of the experience requirement, documentation of completion of the education relied upon must be submitted with the certification exam application. Generally this should be in the form of a transcript from the applicable educational institution. Please review section 100.12.1 of Regulation No. 100 regarding the types of education that may be used to substitute for experience.

Training units may also qualify as education to substitute for a portion of the experience requirement. If you intend to rely on completion of training units, please carefully note the training unit / experience equivalencies set forth in section 100.12.1 of Regulation No. 100. For example, 90 training units (900 contact hours of instruction) would be required to substitute for one year of experience. OCPO has developed a form that should be used for compiling and documenting use of TUs as an experience substitute. Note that although training units used for certification renewal must have been completed during the preceding three-year period of the operator's existing certification, training units do not "expire" for purposes of credit as an education substitute for training.

#### 6. Other Experience Issues:

- a. For purposes of meeting the experience requirement to test for a particular level of certification, the experience relied upon does <u>not</u> have to be at the level of the exam applied for. E.g., four years of experience as a Class D water treatment plant operator could be used to qualify to take a Class A water treatment plant operator examination. Consideration of the quality of prior experience is a matter for consideration by prospective employers when assessing their needs for certified operators.
- b. If an operator holds a current certification at a particular level, it is assumed that the operator meets the requirements for testing for that certification. For example, because there is a two-year minimum experience requirement for a Class C operator, it is assumed that an operator with a Class C certification who wishes to test for a higher level certification had at least one year of actual operating experience at the time of the previous certification (since at least 50% of the two-year experience requirement must be met with actual operating experience). Such an operator could meet the three-year requirement to test at the Class B level by documenting an additional year of experience/education (including at least six months actual operating experience) that occurred subsequent to the date of obtaining the Class C certification. Of course, the operator may alternatively document that a combination of actual operating experience and education obtained prior to and/or after issuance of the Class C certification meets the three-year experience requirement to test at the Class B level.

#### E. <u>Examination Procedures</u>

For admission to an operator certification examination, an approved operator must have (1) a copy of their Applicant Notification Letter and (2) a form of picture identification. Applicants should also bring with them one or more #2 pencils and a standard mathematical calculator. Any calculations must be made on the exam booklet; no scratch paper is needed or permitted.

Please note that for water distribution and wastewater collection certification examinations, no exams will be distributed after 12:00 noon. For water, wastewater, and industrial treatment facility certification examinations, all persons must check in at registration no later than 12:00 noon on full-day testing dates and no later than 6:00 p.m. on Friday night testing dates to receive an exam. All tests will be collected at the specified finish time.

Examinees taking the "A" or "B" certification examinations frequently need five or six hours to complete the exam. For those taking an "A" or "B" exam, 30 minutes will be allowed for lunch; however, applicants must bring whatever they plan on eating to the exam, as they may not leave the immediate area for lunch. Three tenminute breaks are generally allowed, with exams held by the proctors while the applicant is on break.

Cheating of any sort will not be tolerated. Operators taking certification examinations are prohibited from having data transmission devices, including cell phones, in certification examination rooms. Pagers must be turned off or set on silent ring during the examination. Failure to comply with this policy may result in immediate exam revocation, and/or automatic exam failure.

#### F. Notification of Examination Results

Operators will be individually notified of the official results of a certification examination approximately six to eight weeks following an exam date. A list of operators who have passed examinations is generally posted, by exam location, on the OCPO web site (<a href="www.ocpoweb.com">www.ocpoweb.com</a>) approximately three to four weeks following an exam date. Operators who have passed an examination need to pay a \$60.00 administration fee to OCPO to obtain their new certificate, in accordance with instructions provided with the notification of examination results.

Operators who do not pass a certification examination will receive:

- A summary analysis of their individual performance on the different topics tested.
- A statistical summary of the overall performance of examinees on the topics tested.
- A list of study references for the topics tested.

Because of security requirements applicable to the standardized exams used, operators are not able to review their individual exam responses.

# G. Policy Regarding Board Members Taking Certification Examinations

The Board's policy is that members of the Water and Wastewater Facility Operators Certification Board may take operator certification examinations while serving on the Board, except in the following circumstances:

- A Board member who is currently a member of a CECTI/Certification Council exam committee, or who has been a member of such committee within the previous year, shall not be allowed to take an examination prepared by that committee.
- A Board member who has within the prior year had access to certification examinations in the requested discipline in a review process or through the administration of the examinations shall not be allowed to take an examination in that discipline.

Any Board member requesting to take an operator certification examination shall disclose their intentions to the Board prior to taking the examination. Through this policy the Board seeks to allow Board members a reasonable opportunity to take certification examinations while serving on the Board, while avoiding any potential unfair advantage or conflict of interest.